



UNITED STATES PATENT AND TRADEMARK OFFICE

elln
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,690	10/22/2003	Dararith Un	2486/SPRI 107676	4897
32423 7590 05/16/2007 SPRINT COMMUNICATIONS COMPANY L.P. 6391 SPRINT PARKWAY KSOPHT0101-Z2100 OVERLAND PARK, KS 66251-2100			EXAMINER SAMUEL, DEWANDA A	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 05/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/689,690

Applicant(s)

UN ET AL.

Examiner

DeWanda Samuel

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☒ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 49-55** are rejected under 35 U.S.C. 102(e) as being anticipated by Baldwin et al. (PG PUB 2003/0149746 A1).

With regard to claim 49, Baldwin et al. discloses a *method for generating an enhanced data connection*, Baldwin discloses having a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title).

receiving a modem-based data session; Baldwin et al. discloses having a ensoBox that provides subscriber with dial-up access to the Internet (page 3 paragraph 113 line 1-2)...the subscriber dial into the Access node (located in the ensoBox)over the public telephone network using a modem (page 5 paragraph 153 line 1-2).

communicating the data session via at least one communications path traversing an asymmetric data network to at least one enhancement platform; Baldwin et al. discloses having a subscriber dial into a Access node over a the public telephone network ("asymmetric data network", page 5 paragraph 153 line 1-2)...also the subscriber uses a PPP session (point-to-point protocol, page 8 paragraph 223 line1-5)...also in fig. 3 depicts the process for dialing into the ensoBox ("enhancement platform").

processing the data session in the at least one enhancement cluster to enhance a connection to a destination network. Baldwin et al. discloses having a ensoBox... subscribers computers connect to the ensoBox modems via a PPP session (point-to-point protocol, page 8 paragraph 223 line 1-5)...the ensoBox is an integration of

Art Unit: 2616

telecommunications hardware and software, including a router, Fast Ethernet switches, Remote access servers, a caching appliance, Load balancer, DNS server, MA servers, applications servers, and a network based storage system...the ensoBox allows subscribers to remotely access the Internet through dial-up modems (page 9 paragraph 280 line 1-2 and page 10 column 2 line 1-10). It is inferred that the ensoBox has the capability to provide a faster and more secure connection to the Internet.

With regard to claim 50, Baldwin teaches the method recited in claim 49. *wherein the processing comprises at least one of applying compression, applying decompression, performing caching, applying optimization, and applying security to the data session.* Baldwin discloses that the Access node within the ensoBox contains a cache engine (page 5 paragraph 144 and 145 line 1-3).

With regard to claim 51, Baldwin teaches the method recited in claim 49. *wherein the destination network comprises the Internet.* Baldwin discloses in fig.3 that the destination network is the Internet.

With regard to claim 52, Baldwin teaches the method recited in claim 49. *wherein the data session originates as a point-to-point session.* Baldwin disclose having point-to-point protocol (PPP) sessions (page 8 paragraph 223 line 1-5).

With regard to claim 53, Baldwin teaches the method recited in claim 49.

Art Unit: 2616

wherein the connection to the destination network comprises a non-point-to-point session. Baldwin et al. discloses having a Core node that have access to and from the Internet... a Cisco 2621 router provides a direct connection to the Internet (page 10 paragraph 286 line 1-5).

With regard to claim 54, Baldwin teaches the method recited in claim 49.

wherein the at least one communications path comprises at least one tunnel. Baldwin et al. discloses that the Core node provides VPN (virtual private network) connectivity between the ensBox and ensport.com data center. This allows the ensoBox to securely communicate with back office ensoOS management systems located at the data center. The VPN is IPSec compliant and uses Cisco routers on each end of the VPN tunnel ("tunnel")... (page 5 paragraph 141 line 1-8). It is inferred that the a communication path between the ensoBox and ensport.com is a VPN tunnel.

With regard to claim 55, Baldwin teaches the method recited in claim 49.

wherein the at least one communications path encapsulates the data session in a virtual symmetric connection. Baldwin et al. discloses having a network based security that consist of encryption of communications and access controls on the internal LANs within the ensoBox. The encryption is accomplished using existing VPN (virtual private network) features of the Cisco 2621 router. The router is configured to provide encryption of connections between the ensport.com data center and the router within the ensoBox. These connections are commonly refereed to as VPNs (virtual private

Art Unit: 2616

networks, page 9 paragraph 251 line 1-14). It is inferred that communication in a VLAN within the ensoBox is secure with encryption.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claims 1-3, 5, 11-19, 21, 27-33, 37-41, and 45-48** are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin et al. (PG PUB 2003/0149746 A1) in view of Moon et al. (PG PUB 2003/0163577 A1).

With regard to claim 1, Baldwin et al. discloses having a *system for generating an enhanced data*, Baldwin discloses having a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title).

an input interface receiving a modem-based data session established via at least one circuit-switched network communicating with at least one asymmetrically routed data network; Baldwin et al. discloses that the subscribers dial into the access node over the public telephone network using a modem and standard dial-up networking software on their computer. Prior to placing the call the subscriber enters a valid userid/password into dial-up networking window. When a subscriber dials the ensobox telephone number, the call is routed to one of the modem ports on the Remote Access Server ("input interface", page 5 paragraph 153 line 1-8). Baldwin further discloses that the ensobox provides dial-up access to the Internet (page 3 paragraph 113 line 1-2)... and that the core node within the ensobox is the "middle man" between the Internet and the Public Switched Telephone Network (PSTN, paragraph 137 line 1-7). It is inferred that the communication between a subscriber that is using the telephone access (e.g. PSTN) for dial-up to interfacing with the Internet which is an asymmetric network.

However, Baldwin does not disclose having *at least one tunnel, communicating with the input interface and receiving the data session*; Moon et al. discloses that if a packet data from the remote system 311 ("input interface") is inputted into the layer 2 tunnel protocol (L2TP) access concentrator 317 following the establishment of the control connection between the layer 2 tunnel protocol (L2TP) access contractor 317 and the layer 2 tunnel protocol (L2TP) network server 323, that is if an access is required, a session should be established for packet data communication using an actual layer 2 tunnel protocol (L2TP)... a session establishment procedure in fig.3 for the virtual private

Art Unit: 2616

network access... (paragraph 33 line 1-10). It is inferred that a tunnel is used during a session and uses to communicate information to the remote system 311("input interface").

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. utilizing a layer 2 tunnel protocol (L2TP) as taught by Moon et al. to provide a more secure technique to access the communication network.

and at least one enhancement cluster, communicating with the at least one tunnel and a destination network for the data session, the enhancement cluster processing the data session to enhance a connection to the destination network (column 1 paragraph 119 line 1-6). Baldwin et al. discloses having a ensoBox ("enhancement cluster") which comprises nodes that serve a specific purpose...the Access node is responsible for Internet access("destination network") ...the Core node is responsible for routing, security, data storage, and backup...the Service node is responsible for offering services (column 1 paragraph 119 line 1-6)...also that the subscribers computers connect to the ensoBox modems via PPP session (page 8 paragraph 223 line 1-5). It is inferred that the ensoBox process PPP sessions requested by the subscriber. However, Baldwin does not discloses communicating with a tunnel for a data session. Moon et al. discloses that if a packet data from the remote system 311 ("input interface") is inputted into the layer 2 tunnel protocol (L2TP) access concentrator 317

Art Unit: 2616

following the establishment of the control connection between the layer 2 tunnel protocol (L2TP) access contractor 317 and the layer 2 tunnel protocol (L2TP) network server 323, that is if an access is required, a session should be established for packet data communication using an actual layer 2 tunnel protocol (L2TP)...a session establishment procedure in fig.3 for the virtual private network access... (paragraph 33 line 1-10). It is inferred that a tunnel is used during a session and uses to communicate information to the remote system 311("input interface").

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. utilizing a layer 2 tunnel protocol (L2TP) as taught by Moon et al. to provide a more secure technique to access the communication network.

With regard to claim 2, in combination Baldwin et al. and Moon et al. teaches the system recited in claim 1. *Wherein the input interface comprises a set of remote access servers* (page 9 paragraph 280 and page 10 line 1). Baldwin et al. discloses having a ensoBox which includes Remote access servers.

With regard to claim 3, in combination Baldwin et al. and Moon et al. teaches the system recited in claim 1. *Wherein the at least one tunnel comprises a Layer 2 Tunneling Protocol tunnel*. However, Baldwin does not explicitly disclose at least one tunnel comprises a Layer 2 Tunneling Protocol tunnel. Moon et al. discloses that if a

Art Unit: 2616

packet data from the remote system 311 ("input interface") is inputted into the layer 2 tunnel protocol (L2TP) access concentrator 317 following the establishment of the control connection between the layer 2 tunnel protocol (L2TP) access contractor 317 and the layer 2 tunnel protocol (L2TP) network server 323; that is if an access is required, a session should be established for packet data communication using an actual layer 2 tunnel protocol (L2TP)... a session establishment procedure in fig.3 for the virtual private network access... (paragraph 33 line 1-10). It is inferred that a tunnel is used during a session and uses to communicate information to the remote system 311("input interface").

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. utilizing a layer 2 tunnel protocol (L2TP) as taught by Moon et al. to provide a more secure technique to access the communication network.

With regard to claim 5, in combination Baldwin et al. and Moon et al. teaches the system recited in claim 1. *Wherein the at least one enhancement cluster comprises a set of load balancers.* Baldwin et al discloses having ensoBox ("enhancement cluster") with a load balancer.

Baldwin discloses the claimed invention except for additional load balancer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a additional load balancer to efficiently balance the load of the

Art Unit: 2616

servers, since it has been held that mere duplication of the essential working part of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. See MPEP 2144. 04 section VI B

With regard to claim 11, in combination Baldwin et al. and Moon et al. teaches the system recited in claim 1. *Wherein the enhancement of the data session comprises at least one of applying compression, applying decompression, performing caching, applying optimization, and applying security to the data session.* Baldwin discloses that the Access node within the ensoBox ("enhancement cluster") contains a cache engine ("performing caching", page 5 paragraph 144 and 145 line 1-3).

With regard to claim 12, in combination Baldwin et al. and Moon et al. teaches the system recited in claim 1. *Wherein the destination network comprises the Internet.* Baldwin discloses in fig.3 that the destination network is the Internet.

With regard to claim 13, in combination Baldwin et al. and Moon et al. teaches the system recited in claim 1. *Wherein the data session originates as a point-to-point session.* Baldwin disclose having point-to-point protocol (PPP) sessions (page 8 paragraph 223 line 1-5).

With regard to claim 14, in combination Baldwin et al. and Moon et al. teaches the system recited in claim 1. *Wherein the connection to the destination network*

Art Unit: 2616

comprises a non-point-to-point session. Baldwin et al. discloses having a Core node that have access to and from the Internet... a Cisco 2621 router provides a direct connection to the Internet (page 10 paragraph 286 line 1-5).

With regard to claim 15, in combination Baldwin et al. and Moon et al. teaches the system recited in claim 1. *Wherein access to the enhancement cluster is discriminated by at least a domain name.* Baldwin et al. disclose that the ensoBox supports primary domain name service (DNS) for access to locally stored ensoServices and secondary domain name service (DNS) for web browsing (page 8 paragraph 234 line 1-6).

With regard to claim 16, in combination Baldwin et al. and Moon et al. teaches the system recited in claim 1. *A system according to claim 1, further comprising interface to an authentication platform, the authentication platform authenticating the data session for to the access enhancement cluster* (page 8 paragraph 228 and 229 line 1-11). Baldwin discloses that the ensoBox uses a RADIUS server (Remote Authentication Dial-In User Service) to perform AAA functions (authentication, authorization, accounting).

With regard to claim 17, Baldwin et al. discloses a *method for generating an enhanced data connection, comprising:*

Art Unit: 2616

receiving a modem-based data session established via at least one circuit-switched network communicating with at least one asymmetrically routed data network; Baldwin et al. discloses that the subscribers dial into the access node over the public telephone network using a modem and standard dial-up networking software on their computer. Prior to placing the call the subscriber enters a valid userid/password into dial-up networking window. When a subscriber dials the ensobox telephone number, the call is routed to one of the modem ports on the Remote Access Server ("input interface", page 5 paragraph 153 line 1-8). Baldwin further discloses that the ensobox provides dial-up access to the Internet (page 3 paragraph 113 line 1-2)...and that the core node within the ensobox is the "middle man" between the Internet and the Public Switched Telephone Network (PSTN, paragraph 137 line 1-7). It is inferred that the communication between a subscriber that is using the telephone access (e.g. PSTN) for dial-up to interfacing with the Internet which is an asymmetric network.

receiving the data session via at least one tunnel; Moon et al. discloses that if a packet data from the remote system 311 ("input interface") is inputted into the layer 2 tunnel protocol (L2TP) access concentrator 317 following the establishment of the control connection between the layer 2 tunnel protocol (L2TP) access contractor 317 and the layer 2 tunnel protocol (L2TP) network server 323, that is if an access is required, a session should be established for packet data communication using an actual layer 2 tunnel protocol (L2TP)...a session establishment procedure in fig.3 for the virtual private network access... (paragraph 33 line 1-10). It is inferred that a tunnel is used during a

Art Unit: 2616

session and uses to communicate information to the remote system 311("input interface").

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. utilizing a layer 2 tunnel protocol (L2TP) as taught by Moon et al. to provide a more secure technique to access the communication network.

processing the data session in at least one enhancement cluster to enhance a connection to a destination network. Baldwin et al. discloses having a ensoBox... subscribers computers connect to the ensoBox modems via a PPP session (point-to-point protocol, page 8 paragraph 223 line 1-5)...the ensoBox is an integration of telecommunications hardware and software, including a router, Fast Ethernet switches, Remote access servers, a caching appliance, Load balancer, DNS server, MA servers, applications servers, and a network based storage system...the ensoBox allows subscribers to remotely access the Internet through dial-up modems (page 9 paragraph 280 line 1-2 and page 10 column 2 line 1-10). It is inferred that the ensoBox has the capability to provide a faster connection to the Internet.

With regard to claim 18, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 17. *Wherein the step of receiving comprises receiving the modem-based data session in a set of remote access servers.* Baldwin et al. discloses

Art Unit: 2616

that when a subscriber dials the ensoBox telephone number, the call is routed to the modem ports on the Remote access server (page 5 paragraph 153 line 5-8).

With regard to claim 19, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 17. *Wherein the at least one tunnel comprises a Layer 2 Tunneling Protocol tunnel.* However, Baldwin does not explicitly disclose at least one tunnel comprises a Layer 2 Tunneling Protocol tunnel. Moon et al. discloses that if a packet data from the remote system 311 ("input interface") is inputted into the layer 2 tunnel protocol (L2TP) access concentrator 317 following the establishment of the control connection between the layer 2 tunnel protocol (L2TP) access contractor 317 and the layer 2 tunnel protocol (L2TP) network server 323, that is if an access is required, a session should be established for packet data communication using an actual layer 2 tunnel protocol (L2TP)... a session establishment procedure in fig.3 for the virtual private network access... (paragraph 33 line 1-10). It is inferred that a tunnel is used during a session and uses to communicate information to the remote system 311("input interface").

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. utilizing a layer 2 tunnel protocol (L2TP) as taught by Moon et al. to provide a more secure technique to access the communication network.

Art Unit: 2616

With regard to claim 21, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 17. *Wherein the at least one enhancement cluster comprises a set of load balancers*. Baldwin et al discloses having ensoBox (“enhancement cluster”) with a load balancer.

Baldwin discloses the claimed invention except for additional load balancer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a additional load balancer to efficiently balance the load of the servers, since it has been held that mere duplication of the essential working part of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. See MPEP 2144. 04 section VI B.

With regard to claim 27, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 17. *Wherein the processing comprises at least one of applying compression, applying decompression, performing caching, applying optimization, and applying security to the data session*. Baldwin discloses that the Access node within the ensoBox contains a cache engine (page 5 paragraph 144 and 145 line 1-3).

With regard to claim 28, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 17. *wherein the destination network comprises the Internet*. Baldwin discloses in fig.3 that the destination network is the Internet.

With regard to claim 29, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 17. *Wherein the data session originates as a point-to-point session*. Baldwin disclose having point-to-point protocol (PPP) sessions (page 8 paragraph 223 line 1-5).

With regard to claim 30, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 17. *Wherein the connection to the destination network comprises a non-point-to-point session*. Baldwin et al. discloses having a Core node that have access to and from the Internet... a Cisco 2621 router provides a direct connection to the Internet (page 10 paragraph 286 line 1-5).

With regard to claim 31, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 17. *Further comprising discriminating the access to the enhancement cluster by at least a domain name*. Baldwin et al. disclose that the ensoBox supports primary domain name service (DNS) for access to locally stored ensoServices and secondary domain name service (DNS) for web browsing (page 8 paragraph 234 line 1-6).

With regard to claim 32, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 17. *Further comprising authenticating the data session for access to the enhancement cluster* (page 8 paragraph 228 and 229 line 1-11). Baldwin

disclose that the ensoBox uses a RADIUS server (Remote Authentication Dial-In User Service) to perform AAA functions (authentication, authorization, accounting).

With regard to claim 33, Baldwin et al. discloses having a system for *generating an enhanced data*, Baldwin discloses having a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title).

an input interface receiving a modem-based data session established via at least one circuit-switched network communicating with at least one asymmetrically routed data network; Baldwin et al. discloses that the subscribers dial into the access node over the public telephone network using a modem and standard dial-up networking software on their computer. Prior to placing the call the subscriber enters a valid userid/password into dial-up networking window. When a subscriber dials the ensobox telephone number, the call is routed to one of the modem ports on the Remote Access Server ("input interface", page 5 paragraph 153 line 1-8). Baldwin further discloses that the ensobox provides dial-up access to the Internet (page 3 paragraph 113 line 1-2)...and that the core node within the ensobox is the "middle man" between the Internet and the Public Switched Telephone Network (PSTN, paragraph 137 line 1-7). It is inferred that the communication between a subscriber that is using the telephone access (e.g. PSTN) for dial-up to interfacing with the Internet which is an asymmetric network.

However, Baldwin does not disclose having *at least one tunnel, communicating with the*

Art Unit: 2616

input interface and receiving the data session; Moon et al. discloses that if a packet data from the remote system 311 ("input interface") is inputted into the layer 2 tunnel protocol (L2TP) access concentrator 317 following the establishment of the control connection between the layer 2 tunnel protocol (L2TP) access contractor 317 and the layer 2 tunnel protocol (L2TP) network server 323, that is if an access is required, a session should be established for packet data communication using an actual layer 2 tunnel protocol (L2TP)... a session establishment procedure in fig.3 for the virtual private network access... (paragraph 33 line 1-10). It is inferred that a tunnel is used during a session and uses to communicate information to the remote system 311 ("input interface").

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. utilizing a layer 2 tunnel protocol (L2TP) as taught by Moon et al. to provide a more secure technique to access the communication network.

at least one enhancement cluster means, communicating with the at least one tunnel means and a destination network for the data session, the enhancement cluster means processing the data session to enhance a connection to the destination network.

(column 1 paragraph 119 line 1-6). Baldwin et al. discloses having a ensoBox which comprises nodes that serve a specific purpose...the Access node is responsible foe Internet access...the Core node is responsible for routing, security, data storage, and

Art Unit: 2616

backup...the Service node is responsible for offering services... also that the subscribers computers connect to the ensoBox modems via PPP session (page 8 paragraph 223 line 1-5). It is inferred that the ensoBox process PPP sessions requested by the subscriber.

However, Baldwin does not disclose communicating with a tunnel for a data session.

Moon et al. discloses that if a packet data from the remote system 311 ("input interface") is inputted into the layer 2 tunnel protocol (L2TP) access concentrator 317 following the establishment of the control connection between the layer 2 tunnel protocol (L2TP) access contractor 317 and the layer 2 tunnel protocol (L2TP) network server 323, that is if an access is required, a session should be established for packet data communication using an actual layer 2 tunnel protocol (L2TP)...a session establishment procedure in fig.3 for the virtual private network access... (paragraph 33 line 1-10). It is inferred that a tunnel is used during a session and uses to communicate information to the remote system 311("input interface").

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. utilizing a layer 2 tunnel protocol (L2TP) as taught by Moon et al. to provide a more secure technique to access the communication network.

With regard to claim 37, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 33. *Wherein the enhancement of the data session*

Art Unit: 2616

comprises at least one of applying compression, applying decompression, performing caching, applying optimization, and applying security to the data session.

Baldwin discloses that the Access node within the ensoBox contains a cache engine (page 5 paragraph 144 and 145 line 1-3).

With regard to claim 38, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 33. *Wherein the destination network comprises the Internet.* Baldwin discloses in fig.3 that the destination network is the Internet.

With regard to claim 39, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 33. *Wherein the data session originates as a point-to-point session.* Baldwin disclose having point-to-point protocol (PPP) sessions (page 8 paragraph 223 line 1-5).

With regard to claim 40, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 33. *Wherein the connection to the destination network comprises a non-point-to-point session.* Baldwin et al. discloses having a Core node that have access to and from the Internet... a Cisco 2621 router provides a direct connection to the Internet (page 10 paragraph 286 line 1-5).

With regard to claim 41, Baldwin discloses having *an enhanced data session, the enhanced data session being generated by a method*; Baldwin discloses having a

Art Unit: 2616

Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title).

receiving a modem-based data session established via at least a circuit-switched network communicating with at least one asymmetrically routed data network; Baldwin et al. discloses that the subscribers dial into the access node over the public telephone network using a modem and standard dial-up networking software on their computer. Prior to placing the call the subscriber enters a valid userid/password into dial-up networking window. When a subscriber dials the ensobox telephone number, the call is routed to one of the modem ports on the Remote Access Server ("input interface", page 5 paragraph 153 line 1-8). Baldwin further discloses that the ensobox provides dial-up access to the Internet (page 3 paragraph 113 line 1-2)...and that the core node within the ensobox is the "middle man" between the Internet and the Public Switched Telephone Network (PSTN, paragraph 137 line 1-7). It is inferred that the communication between a subscriber that is using the telephone access (e.g. PSTN) for dial-up to interfacing with the Internet which is an asymmetric network.

However, Baldwin et al. does not disclose *communicating the data session to at least one tunnel;* Moon et al. discloses that if a packet data from the remote system 311 ("input interface") is inputted into the layer 2 tunnel protocol (L2TP) access concentrator 317 following the establishment of the control connection between the layer 2 tunnel protocol (L2TP) access contractor 317 and the layer 2 tunnel protocol (L2TP) network

Art Unit: 2616

server 323, that is if an access is required, a session should be established for packet data communication using an actual layer 2 tunnel protocol (L2TP)...a session establishment procedure in fig.3 for the virtual private network access... (paragraph 33 line 1-10). It is inferred that a tunnel is used during a session and uses to communicate information to the remote system 311("input interface").

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. utilizing a layer 2 tunnel protocol (L2TP) as taught by Moon et al. to provide a more secure technique to access the communication network.

transmitting the data session to at least one enhancement cluster via the at least one tunnel; Baldwin et al. disclose the subscribers computer connect to the ensoBox ("enhancement cluster") modems via PPP session (point-to-point protocol).

However, Baldwin et al. does not discloses having the data session in a tunnel. Moon et al. discloses that if a packet data from the remote system 311 ("input interface") is inputted into the layer 2 tunnel protocol (L2TP) access concentrator 317 following the establishment of the control connection between the layer 2 tunnel protocol (L2TP) access contractor 317 and the layer 2 tunnel protocol (L2TP) network server 323, that is if an access is required, a session should be established for packet data communication using an actual layer 2 tunnel protocol (L2TP)...a session establishment procedure in fig.3 for the virtual private network access... (paragraph 33 line 1-10). It is inferred that a

Art Unit: 2616

tunnel is used during a session and uses to communicate information to the remote system 311("input interface").

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. utilizing a layer 2 tunnel protocol (L2TP) as taught by Moon et al. to provide a more secure technique to access the communication network.

processing the data session to generate an enhanced session in the at least one enhancement cluster, the enhanced session connecting to a destination network.

Baldwin et al. discloses having a ensoBox... subscribers computers connect to the ensoBox modems via a PPP session (point-to-point protocol, page 8 paragraph 223 line 1-5)...the ensoBox is an integration of telecommunications hardware and software, including a router, Fast Ethernet switches, Remote access servers, a caching appliance, Load balancer, DNS server, MA servers, applications servers, and a network based storage system...the ensoBox allows subscribers to remotely access the Internet through dial-up modems (page 9 paragraph 280 line 1-2 and page 10 column 2 line 1-10). It is inferred that the ensoBox has the capability to provide a faster connection to the Internet.

With regard to claim 45, in combination Baldwin et al. and Moon et al. teaches the enhanced data session recited in claim 41. *Wherein the processing comprises at*

Art Unit: 2616

least one of applying compression, applying decompression, performing caching, applying optimization, and applying security to the data session. Baldwin discloses that the Access node within the ensoBox contains a cache engine (page 5 paragraph 144 and 145 line 1-3).

With regard to claim 46, in combination Baldwin et al. and Moon et al. teaches the enhanced data session recited in claim 41. *Wherein the destination network comprises the Internet.* Baldwin discloses in fig.3 that the destination network is the Internet.

With regard to claim 47, in combination Baldwin et al. and Moon et al. teaches the enhanced data session recited in claim 41. *Wherein the data session originates as a point-to-point session.* Baldwin disclose having point-to-point protocol (PPP) sessions (page 8 paragraph 223 line 1-5).

With regard to claim 48, in combination Baldwin et al. and Moon et al. teaches the enhanced data session recited in claim 41. *Wherein the connection to the destination network comprises a non-point-to-point session.* Baldwin et al. discloses having a Core node that have access to and from the Internet... a Cisco 2621 router provides a direct connection to the Internet (page 10 paragraph 286 line 1-5).

7. **Claims 6 and 22** is rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin et al. (PG PUB 2003/0149746 A1) and Moon et al. (PG PUB 2003/0163577 A1)

Art Unit: 2616

as applied to claim 1 and 17 above, and further in view of Arrow (US Patent 6,226,751).

With regard to claim 6, in combination Baldwin et al. and Moon et al. teaches the system recited in claim 1. *Wherein the at least one enhancement cluster comprises a set of compression servers.* Baldwin et al discloses having ensoBox ("enhancement cluster"). However, Baldwin doe not explicitly disclose having set of compression servers. Arrow et al. discloses having a VPN unit (virtual private network unit, "enhancement cluster") with a compression-decompression unit 732 (column 10 line 44-48).

In combination Baldwin et al., Moon et al. and Arrow discloses the claimed invention except for an additional compression/decompression unit 732 ("compression server") as taught by Arrow. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have additional compression/decompression unit 732 ("compression server") to handle the large volume of dial-up Internet access traffic, since it has been held that mere duplication of the essential working part of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. See MPEP 2144. 04 section VI B

With regard to claim 22, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 17. *Wherein the at least one enhancement cluster comprises a set of compression servers.* Baldwin et al discloses having ensoBox ("enhancement

Art Unit: 2616

cluster"). However, Baldwin does not explicitly disclose having set of compression servers. Arrow et al. discloses having a VPN unit (virtual private network unit, "enhancement cluster") with a compression-decompression unit 732 (column 10 line 44-48).

In combination Baldwin et al., Moon et al. and Arrow discloses the claimed invention except for an additional compression/decompression unit 732 ("compression server") as taught by Arrow. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have additional compression/decompression unit 732 ("compression server") to handle the large volume of dial-up Internet access traffic, since it has been held that mere duplication of the essential working part of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. See MPEP 2144.04 section VI B.

8. Claims 4, 7, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin et al. (PG PUB 2003/0149746 A1) and Moon et al. (PG PUB 2003/0163577 A1) as applied to claims 1 and 17 above, and further in view of Lin (US Patent 7,117,530).

With regard to claim 4, in combination Baldwin et al. and Moon et al. teaches the system recited in claim 1. *Wherein the at least one tunnel comprises a plurality of tunnels (fig. 2)*. However, Baldwin et al. does not disclose having at least one tunnel comprises a plurality of tunnels. Lin discloses having a scalable and reliable VPN tunnel implantation. Lin further discloses as the tunnel client 204 attempts to establish a tunnel

with a tunnel server it sends a tunnel establishment request to the tunnel designator 202 (column 2 line 45-53)...the system is 200 is in a hybrid structural/functional manner... the tunnels are IPSEC/Firewall protected as seen in fig.2 (column 2 line 54-62). It is inferred that the tunnel designator 202 establishes new tunnels as requested within the IPSEC/Firewall protected tunnel path.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a tunnel designator that establishes tunnels within a IPSEC/Firewall protected tunnel path as taught by Lin to transport data in more secure and reliable path.

With regard to claim 7, in combination Baldwin et al. and Moon et al. teaches the system recited in claim 1. *Wherein the at least one enhancement cluster comprises a set of tunnel servers.* Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having tunnel servers. Lin discloses having a VPN (virtual private network) tunnel implementation with a tunnel server farm 206 (fig. 2).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title)

Art Unit: 2616

as taught by Baldwin et al. with a tunnel server farm 206 as taught by Lin to provide high speed security services to secure data in transit.

With regard to claim 20, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 17. *wherein the at least one tunnel comprises a plurality of tunnels*. However, Baldwin et al does not disclose having at least one tunnel comprises a plurality of tunnels. Lin discloses having a scalable and reliable VPN tunnel implantation. Lin further discloses as the tunnel client 204 attempts to establish a tunnel with a tunnel server it sends a tunnel establishment request to the tunnel designator 202 (column 2 line 45-53)...the system is 200 is in a hybrid structural/functional manner... the tunnels are IPSEC/Firewall protected as seen in fig.2 (column 2 line 54-62). It is inferred that the tunnel designator 202 establishes new tunnels as requested within the IPSEC/Firewall protected tunnel path.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a tunnel designator that establishes tunnels within a IPSEC/Firewall protected tunnel path as taught by Lin to transport data in more secure and reliable path.

With regard to claim 23, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 17. *Wherein the at least one enhancement cluster*

Art Unit: 2616

comprises a set of tunnel network servers. Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not disclose having tunnel servers. Lin discloses having a VPN (virtual private network) tunnel implementation with a tunnel server farm 206 (fig. 2).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a tunnel server farm 206 as taught by Lin to provide high speed security services to secure data in transit.

9. Claims 8-10, 24-26, 35-36 and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin et al. (PG PUB 2003/0149746 A1) and Moon et al. (PG PUB 2003/0163577 A1) as applied to claim 1, 17,33, and 41 above, and further in view of Baldwin (PG PUB 2003/0078996 A1).

With regard to claim 8, in combination Baldwin et al. and Moon et al. teaches the system recited in claim 1. *Wherein the at least one enhancement cluster comprises a set of distributed enhancement platforms.* Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not disclose having a set of distributed enhancement platforms. Baldwin (2003/0078996

Art Unit: 2616

A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform... the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 9 in combination Baldwin et al. and Moon et al. teaches the system recited in claim 8. *Wherein at least two of the set of distributed enhancement platforms are operated by separate access providers.* Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having a set of distributed enhancement platforms. Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and

Art Unit: 2616

industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform... the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 10, in combination Baldwin et al. and Moon et al. teaches the system recited in claim 9. *Wherein the at least two of the set of distributed enhancement platforms are hosted at separate locations.* Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having at least two of the set of distributed enhancement platforms are hosted at separate locations. Baldwin discloses having Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). It is obvious that the Ensobox ("enhancement

Art Unit: 2616

cluster”) clustered services architecture is a autonomous therefore it can be hosted in a different locations.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 24, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 17. *Wherein the at least one enhancement cluster comprises a set of distributed enhancement platforms*. Baldwin discloses having a Ensobox (“enhancement cluster”) an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having a set of distributed enhancement platforms. Baldwin (2003/0078996 A1) discloses having a Ensobox (“enhancement cluster”) clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform... the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 25, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 17. *Wherein at least two of the set of distributed enhancement platforms are operated by separate access providers.* Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having a set of distributed enhancement platforms. Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform... the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider

Art Unit: 2616

appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 26, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 25. *Wherein the at least two of the set of distributed enhancement platforms are hosted at separate locations.* Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having a set of distributed enhancement platforms. Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform... the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title)

as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 35, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 33. *Wherein the at least one enhancement cluster means comprises a set of distributed enhancement platform means.* Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having a set of distributed enhancement platforms. Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform... the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 36, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 33. *Wherein at least two of the set of distributed enhancement platform means are operated by separate access providers*. Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having a set of distributed enhancement platforms. Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform... the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 43, in combination Baldwin et al. and Moon et al. teaches the enhanced data session recited in claim 41. *Wherein the at least one enhancement clusters comprises a set of distributed enhancement platforms.* Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having a set of distributed enhancement platforms. Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform... the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual patform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 44, in combination Baldwin et al. and Moon et al. teaches the enhanced data session recited in claim 43. *Wherein at least two of the set of*

Art Unit: 2616

distributed enhancement platforms are operated by separate access providers. Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having a set of distributed enhancement platforms. Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform... the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

10. Claims 34 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin et al. (PG PUB 2003/0149746 A1) and Moon et al. (PG PUB

Art Unit: 2616

2003/0163577 A1) as applied to claim 33 and 41 above, and further in view of Arrow et al. (US Patent 6,226,751).

With regard to claim 34, in combination Baldwin et al. and Moon et al. teaches the method recited in claim 33. *Wherein the at least one enhancement cluster means comprises a set of compression server means.* Baldwin et al discloses having ensoBox ("enhancement cluster"). However, Baldwin doe not explicitly disclose having set of compression servers. Arrow et al. discloses having a VPN unit (virtual private network unit, "enhancement cluster") with a compression-decompression unit 732 (column 10 line 44-48).

In combination Baldwin et al., Moon et al. and Arrow discloses the claimed invention except for an additional compression/decompression unit 732 ("compression server") as taught by Arrow. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have additional compression/decompression unit 732 ("compression server") to handle the large volume of dial-up Internet access traffic, since it has been held that mere duplication of the essential working part of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. See MPEP 2144. 04 section VI B.

With regard to claim 42, in combination Baldwin et al. and Moon et al. teaches the enhanced data session recited in claim 41. *Wherein the at least one enhancement*

Art Unit: 2616

cluster comprises a set of compression servers. Baldwin et al discloses having ensoBox ("enhancement cluster"). However, Baldwin does not explicitly disclose having set of compression servers. Arrow et al. discloses having a VPN unit (virtual private network unit, "enhancement cluster") with a compression-decompression unit 732 (column 10 line 44-48).

In combination Baldwin et al., Moon et al. and Arrow discloses the claimed invention except for an additional compression/decompression unit 732 ("compression server") as taught by Arrow. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have additional compression/decompression unit 732 ("compression server") to handle the large volume of dial-up Internet access traffic, since it has been held that mere duplication of the essential working part of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. See MPEP 2144.04 section VI B.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DeWanda Samuel whose telephone number is (571) 270-1213. The examiner can normally be reached on Monday- Thursday 8:30-5:30 EST.

Art Unit: 2616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DeWanda Samuel
5/9/2007


RICKY Q. NGO
SUPERVISORY PATENT EXAMINER